

REMARKS

Claims 2, 6 and 9-24 are pending in this application. By this Amendment, claims 1, 3-5, 7 and 8 are canceled; claims 2 and 6 are amended and claims 9-24 are added.

A Claim for Priority was made on January 18, 2002. In addition, a certified copy of the priority document was filed at that time. The Examiner is respectfully requested to acknowledge receipt of the priority document.

Applicants thank Examiner Naff for the courtesies extended during the February 5, 2004 personal interview. As indicated by the Examiner, "in the absence of better prior art the claims may be free of the art." Applicants' further separate record of the substance of the interview is incorporated into the following remarks.

Claims 1-8 are rejected under 35 U.S.C. §112, second paragraph. Applicants respectfully traverse the rejection.

Claims 1, 3-5 and 7-8 have been canceled in favor of new claims 9-24. In addition, claims 2 and 6 have been amended to depend on new claims 9 and 10, respectively. Claims 15-24, which are directed to methods of removing an exogenous endocrine-disrupting chemical in water, clearly recite at least one method step. Based on the addition of the method step, it is respectfully submitted that the rejection under 35 U.S.C. §112 should be reconsidered and withdrawn.

Claims 1-4 are rejected under 35 U.S.C. §103 over Levy in view of Reischl. In addition, claims 5-8 are rejected under 35 U.S.C. §103 over Levy in view of Reischl and further in view of Offenbacher et al. Applicants respectfully traverse the rejections.

Levy is directed to contaminate-reducing agent delivery compositions useful for the control of organic or inorganic contaminants in aquatic or terrestrial environments. In the compositions, one or more superabsorbent polymers act as the primary carriers of one or more contaminate-reducing agents effective for the control of organic or inorganic contaminants.

See the Abstract. As the superabsorbent polymers, Levy teaches hydrophilic polymers. Col. 3, line 55-57. In addition, as a contaminate-reducing agent, Levy teaches aerobic or anaerobic microbial agents. Col. 6, lines 15-17. As indicated in the Office Action, Levy does not teach or suggest that the carrier contains both a hydrophilic group and a hydrophobic group, as recited in the present claims.

Reischl is directed to a process for the production of polyurethane(urea) compositions containing lignite and/or peat bound in an abrasion-proof manner. The compositions are produced by reacting isocyanate-terminated prepolymers with more than the stoichiometric quantity of water in the presence of lignite and/or peat and optionally in the presence of organic and/or inorganic fillers and biomasses, such as living cells, living bacteria, or enzymes. The compositions can be used, in a form optionally containing biomasses incorporated therein, as carriers in microbial synthesis processes for the production of complicated organic compounds. See the Abstract.

Hydrophilic prepolymers provide a different carrier than hydrophobic prepolymers. In particular, as described at column 9, lines 61-68, of Reischl:

[w]hen strongly hydrophilic prepolymers are used, the polyurethane(urea) carriers containing lignite and/or peat are present in a more or less gel-like swollen form (which may be foam-like) which feels moist. On the other hand, carrier compositions which are produced according to the present invention based on hydrophobic prepolymers feel dry and are clearly different from the gel-like products.

As noted by the Examiner, Reischl also indicates that "[i]n some cases it is also very advantageous to use a mixture of hydrophilic and hydrophobic prepolymers, particularly in order to produce a lump form product." Col. 10, lines 5-8.

Neither Levy nor Reischl teach or suggest that polymers containing a mixture of hydrophilic and hydrophobic groups should be used to form the contaminant-reducing agents delivery compositions of Levy, which clearly indicates that hydrophilic polymers should be

used. In addition, Reischl does not teach or suggest that it is advantageous to use a mixture of hydrophilic and hydrophobic groups where microorganisms are being included in the composition, as in the present invention. Although Reischl indicates that biomasses are optionally included in the compositions described therein, the focus of Reischl is clearly not on the incorporation of microorganisms. Instead, the focus of Reischl is on the inclusion of lignite and/or peat. Thus, one of ordinary skill in the art would not look to Reischl to determine the best carrier for microorganisms. Furthermore, neither Levy and Reischl teach or suggest that the hydrophobic group adsorbs the exogenous endocrine-disrupting chemical, thereby allowing the microorganisms to more easily decompose the exogenous endocrine-disrupting chemical.

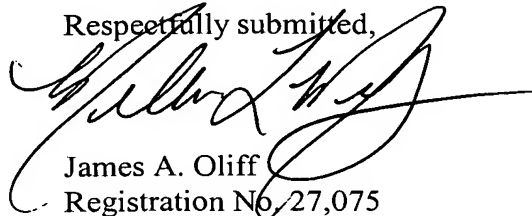
Offenbacher is directed to immobilizing biological components such as enzymes in a three-dimensional cross-linked hydrophobic polymer. Offenbacher does not teach or suggest a microorganism-immobilized carrier provided with a hydrophilic group and a hydrophobic group, as described in the present claims. Thus, Offenbacher does not overcome the deficiencies of Levy and/or Reischl.

None of the cited references teach or suggest all of the features of the present claims. Therefore, the rejections under 35 U.S.C. §103 should be reconsidered and withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 2, 6 and 9-24 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Melanie L. Mealy
Registration No. 40,085

JAO:MLM/jam

Date: February 10, 2004

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

**DEPOSIT ACCOUNT USE
AUTHORIZATION**

Please grant any extension
necessary for entry;

Charge any fee due to our
Deposit Account No. 15-0461